

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/051818 A3

(51) International Patent Classification⁷: **B65H 23/032 // 23/10**

(21) International Application Number:
PCT/BE2004/000168

(22) International Filing Date:
29 November 2004 (29.11.2004)

(25) Filing Language:
English

(26) Publication Language:
English

(30) Priority Data:
03447277.9 28 November 2003 (28.11.2003) EP

(71) Applicant (*for all designated States except US*): **XEIKON INTERNATIONAL N.V. [BE/BE]; Duwijkstraat 17, B-2500 Lier (BE).**

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **COSTROP, Dirk [BE/BE]; Waarlossteenweg 10B, B-2570 Duffel (BE). WOUTERS, Eduard [BE/BE]; Patree Kenislaan 31, B-2970 Schilde (BE). RAMAEKERS, Tom [BE/BE]; Ter Varenstraat 57, B-2640 Mortsel (BE). WATERSCHOOT, William [BE/BE]; Nieuwe Baan 119, B-9111 Belsele (BE).**

(74) Agents: **BIRD, William, E. et al.; Bird Goen & Co., Klein Dalenstraat 42A, B-3020 Winksele (BE).**

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**

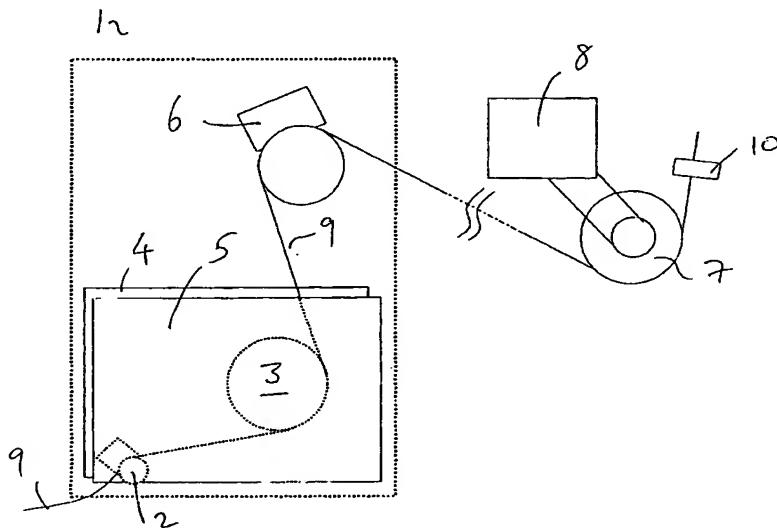
(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): **ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).**

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

[Continued on next page]

(54) Title: DEVICE AND METHOD TO FEED AND ALIGN A WEB WITH INCREASED WEB STABILITY FOR PRINTING



(57) Abstract: A web alignment method and apparatus for a printing system is described, the system comprising a friction drive. The alignment device provides one or more of the following: a) a stable medium path with reduced web-walk, b) an alignment system that is not sensitive to the mechanical alignment of an upstream device such as a roll unwinder, c) an alignment system having a lower complexity and lower cost than active controlled systems, and d) an alignment system that is compatible with a wide range of media, ranging from lightweight papers (for example 60gsm) to heavyweight stock (such as 300 gsm) including high weight high gloss coated grades. The alignment device comprises means for supporting the web in an arcuate form between adjustable side guides.

WO 2005/051818 A3



Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:

30 June 2005